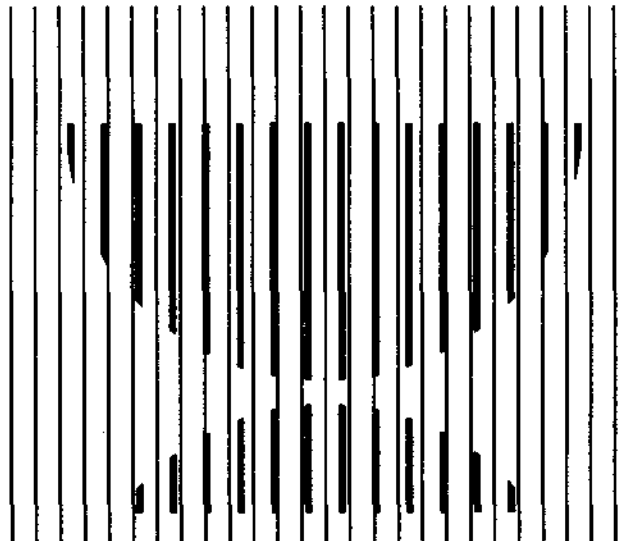


# **CBO STAFF MEMORANDUM**

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**EFFECTS OF CONGRESSIONAL ACTION  
IN FISCAL YEAR 1990 ON THE  
APRIL 1989 FIVE-YEAR DEFENSE PROGRAM**

February 1990



**THE CONGRESS OF THE UNITED STATES  
CONGRESSIONAL BUDGET OFFICE  
SECOND AND D STREETS, S.W.  
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This Congressional Budget Office Staff Memorandum presents estimates of the effects on the out-years of the Five-Year Defense Program of Congressional actions on the fiscal year 1990 defense budget. It was prepared at the request of the Committee on Armed Services of the U.S. House of Representatives. R. William Thomas and Raymond J. Hall performed the analysis under the supervision of Robert F. Hale and Michael A. Miller. Questions regarding the memorandum should be directed to R. William Thomas at (202) 226-2909.

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## SUMMARY

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In recent years, some members of the Congress have expressed concern that Congressional actions on the defense budget--especially its approval of funding for large new weapon systems--could create pressure for higher defense spending in future years. If the Congress continues to reduce the real level of total funding available for defense as it has since 1985, such pressure could present budgetary problems. To help assess the importance of this concern, the Congressional Budget Office (CBO) has analyzed the effects that Congressional action on the 1990 defense budget would have on defense spending in the "out-years,"--that is, the years beyond 1990.

In 1990, the Congress reduced the request of the Department of Defense (DoD) for budget authority by 1.4 percent. Congressional revisions included changes in defense programs that reduced 1990 budget authority and changes in accounting procedures that added to 1990 budget authority. CBO focused on the programmatic changes since these are the ones that would affect what DoD buys and how many people it employs in the out-years. These programmatic changes amounted to slightly less than 3 percent of DoD's budget request.

CBO estimates that, when these 1990 programmatic actions are applied to out-year funding in the April 1989 Five-Year Defense Program (FYDP), funding would be lower by about 2.5 percent. This adjustment alone would not bring FYDP spending into line with the fewer dollars that would be available for defense if the

Congress continues to impose the same defense reductions it has required since 1985.

In other ways, however, the Congress took action that helped ease budget concerns. For example, the Congress did not sacrifice funding related to readiness in favor of procurement. Moreover, disproportionate reductions in research funding may have eased pressure for future increases in procurement spending.

There is, of course, no way to know with certainty what effects Congressional action taken in 1990 will have on the out-years. The Congress is rarely explicit about its intentions for out-year funding. Moreover, future Congresses can always alter the effects of past decisions. Thus, this analysis can only project possible effects in the out-years, assuming that budgetary directions in 1990 remain unchanged.

Furthermore, this analysis has limited relevance for the DoD budget request recently presented to the Congress. In keeping with language in the report that requested its assistance, CBO created estimates of the effects in the out-years of DoD's April 1989 FYDP--a plan that details spending for each military operating unit, weapon, and research program. That plan requested budget authority of about \$1.61 trillion for the 1990-1994 period. The Administration clearly intends to make major changes in the plan. For example, the fiscal year 1991 budget submitted by the Administration projects total DoD funding over the 1990-1994 period to be only \$1.5 trillion, 7 percent less than the total in the April 1989 FYDP. But the details

of the changes are not currently available. Thus, CBO can only analyze changes to the April 1989 FYDP, even though these would not apply to the latest budget proposal.

#### CONGRESSIONAL ACTION IN 1990

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In 1990, DoD budget authority was reduced from the Administration's budget request by a total of \$4.2 billion or 1.4 percent. This reduction reflects actions taken by the Congress during the regular budget process and also cuts made under the budget sequestration.

#### Effects of Regular Budget Review

During its regular review, the Congress made changes to nearly every part of the DoD budget request for 1990. Some actions added to budgetary costs--for example, authorizing the purchase of 18 new F-14D aircraft and approving \$255 million to continue development of the V-22 Osprey aircraft. Other changes, such as reductions to Air Force aircraft programs and the Strategic Defense Initiative, reduced DoD's expenditures in 1990 and may have reduced pressure for spending in future years. Overall, the Department of Defense Appropriation Act for 1990, together with the Military Construction Appropriation Act for 1990, collectively provided \$293.3 billion in DoD budget authority. This sum amounted to a reduction of \$2.3 billion dollars, or less than 1 percent, from the amended budget request submitted by the Administration in April 1989 (see Table 1). Among the five major

TABLE 1. CONGRESSIONAL CHANGES TO THE FISCAL YEAR 1990  
DEPARTMENT OF DEFENSE BUDGET  
(In billions of dollars of budget authority)

Appropriation Title	Administration's 1990 Amended Request	Appropriation Changes	Effect of Sequestration and Transfers	Post-Sequestration Budget Authority for 1990
Military Personnel	79.2	-0.5	-0.2	78.5
Operation and Maintenance/ Revolving Funds	91.0	-5.3	0.3	86.0
Procurement	78.8	5.1	-1.3	82.6
Research and Development	39.5	-2.4	-0.3	36.8
Military Construction and Family Housing	8.1	0.4	0.0	8.5
Other (Including Offsetting Receipts)	-0.9	0.2	-0.3	-1.0
Total DoD Military	295.6	-2.3	-1.8	291.4

SOURCE: Congressional Budget Office.

NOTE: Details may not add to totals because of rounding.

appropriation titles, the largest reduction occurred in funds for operation and maintenance. This reduction was nearly offset by a substantial increase in funding for procurement.

#### Effects of the Sequestration

In addition to cuts imposed during the regular Congressional review, the partial sequestration imposed by the Budget Reconciliation Act of 1989 reduced DoD budget authority by another \$1.5 billion. Under sequestration rules, appropriations like operation and maintenance (O&M) that had already been cut substantially during the regular budget review were affected very little by sequestration. Moreover, DoD elected to use its authority to transfer funds among the appropriations accounts to protect military personnel from major cuts. Thus, the majority of the sequestration was allocated to procurement (see Table 1). DoD also increased its estimate of offsetting receipts by \$0.3 billion, resulting in a total reduction of \$1.8 billion to DoD budget authority.

Taken together, Congressional action during the regular budget review and the sequestration suggest a total cut of \$4.2 billion in DoD budget authority. Reductions of \$5.0 billion in funding for operation and maintenance and \$2.7 billion in research and development funds were offset in part by a substantial addition of \$3.8 billion in funding for procurement and a \$0.4 billion increase in military construction appropriations.



## IDENTIFYING PROGRAMMATIC CHANGES

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Because of important accounting changes, however, the reductions shown in Table 1 do not accurately portray the size or distribution of the programmatic changes made by the Congress. In 1990, the Congress mandated accounting changes that involved transfers of budget authority among the accounts making up the DoD budget that did not involve any change in planned activities or their ultimate costs. These accounting changes had the effect of reducing estimates of 1990 outlays in order to comply with the budget resolution totals for defense.

### Accounting Changes

The largest of these accounting changes involves the treatment of installation costs. DoD periodically modifies major weapons to ensure that they can still operate properly and defeat new enemy weapons. Modifications may involve, for example, adding new communications or offensive or defensive systems. While the actual costs of hardware are included in procurement requests, the costs of installing these modification kits were requested as part of O&M appropriations in the fiscal year the installation was to be performed. However, according to Congressional directions issued last year, the services are now to include installation costs along with the cost of acquiring the kits in their procurement requests. A total of \$1.9 billion was transferred from the operation and maintenance to the procurement accounts to pay for installations scheduled in 1990; an additional \$3.1 billion was included in the 1990 procurement appropriation to pay for installations scheduled for 1991 and later years.

Another accounting change involved the cost of refueling and modernizing the aircraft carrier *Enterprise*. The Navy planned to fund this cost over a period of years through O&M funds. Instead, the Congress appropriated the full cost of \$1.4 billion in the Navy's 1990 procurement appropriation. This action increased DoD's budget authority by a net of \$1.3 billion in 1990.

Two other accounting changes involved smaller but still significant sums. The authorizing and appropriating committees directed DoD to request procurement funds to modernize depots, rather than use the revolving funds for these purchases. The result was a transfer of \$0.5 billion from the operation and maintenance to the procurement appropriation. Also, the base closing account was included in the Military Construction Appropriation Act rather than the DoD Appropriation Act. This change transferred an additional \$0.5 billion from the O&M appropriation to military construction.

Together, the accounting changes reduced O&M appropriations by \$2.9 billion, while adding \$0.5 billion to military construction appropriations and \$6.8 billion to procurement appropriations (see Table 2).

#### Programmatic Changes

CBO made adjustments for these accounting changes in order to focus on programmatic changes. These programmatic changes reveal a different size and pattern of reductions than the unadjusted figures. Table 1 suggests that

TABLE 2. ACCOUNTING AND PROGRAMMATIC CHANGES TO THE DEFENSE BUDGET  
(In billions of dollars of budget authority)

Appropriation	Administration's 1990 Amended Request	Accounting Changes	Sequestration and Programmatic Changes	Post-Sequestration Budget Authority for 1990
Military Personnel	79.2	0.0	-0.7	78.5
Operation and Maintenance/ Revolving Funds	91.0	-2.9	-2.1	86.0
Procurement	78.8	6.8 <sup>a/</sup>	-3.0	82.6
Research and development	39.5	0.0	-2.7	36.8
Military Construction and Family Housing	8.1	0.5	-0.1	8.5
Other	-0.9	0.0	-0.1	-1.0
Total Department of Defense	295.6	4.4	-8.6	291.4

SOURCE: Congressional Budget Office.

NOTE: Details may not add to totals because of rounding.

- a. This total consists of \$2.4 billion transferred from the operation and maintenance accounts and \$4.4 billion that was added by the Congress to fund fully the installation of modifications as well as refueling and modification of the carrier *Enterprise*.

Congressional review and the sequestration reduced total budget authority by \$4.2 billion or 1.4 percent. But DoD's fiscal year program was actually reduced by \$8.6 billion or nearly 3 percent. This reduction was partially masked by the \$4.4 billion in forward funding added to the procurement accounts (see Table 2). Moreover, the pattern of reduction is much different from what Table 1 suggests. All appropriations were reduced but, rather than favoring procurement over operation and maintenance, programmatic cuts actually resulted in a larger percentage reduction in procurement than in operation and maintenance.

#### EFFECTS OF CONGRESSIONAL ACTION ON THE OUT-YEARS

In its reports accompanying the 1990 defense budget, the Congress provided explicit guidance about its out-year intentions for only a limited number of major programs. Therefore, there is no way to estimate with any confidence the effects of decisions in 1990 on the out-years.

#### Method of Adjusting the FYDP

To illustrate one possible set of effects on the out-years, however, CBO calculated the percentage change the Congress made to the 1990 DoD request for each of the approximately 60 DoD appropriation accounts and assumed that these same percentage changes apply to the out-year funding in the April 1989 FYDP. Thus, for example, if the Congress reduced the Air Force's request for military personnel appropriations by 5 percent in 1990, CBO assumed that the Congress intended to

reduce the planned FYDP funding for that account in the 1991-1994 period by 5 percent in each year. CBO first calculated the projected effects in the out-years based on the programmatic changes in 1990; it then made adjustments for the accounting changes the Congress required. This two-step procedure was necessary because the FYDP estimates did not incorporate the accounting changes. Because of possible problems with security classification, for fiscal years 1992 through 1994, the percentages were calculated and applied to each of the six appropriations titles rather than to the approximately 60 accounts.

Estimates. The resulting estimates for defense budget authority, labeled the "Adjusted FYDP," are lower than those in the April 1989 FYDP (see Table 3 and Figure 1). Specifically, the adjustments total \$39.9 billion over the five years and represent about 2.5 percent of the April 1989 FYDP total. The adjusted FYDP path does not represent a projection for actual defense spending, because it does not take into account further changes that DoD and the Congress might make in 1991 and future years. Indeed, the Administration's current estimates for DoD budget authority--reported in the fiscal year 1991 budget submission--are \$116 billion below the April 1989 FYDP's total for the 1990-1994 period.

Limitations. The percentage method used by CBO to create the adjusted FYDP might have failed to capture significant changes made by the Congress. For example, if the Congress terminated a weapon system or cut specific forces, that action might have had only a modest effect on appropriations for 1990. By 1994, however, that termination might have saved a large amount of money. A similar argument, though opposite in direction, would apply if the Congress mandated

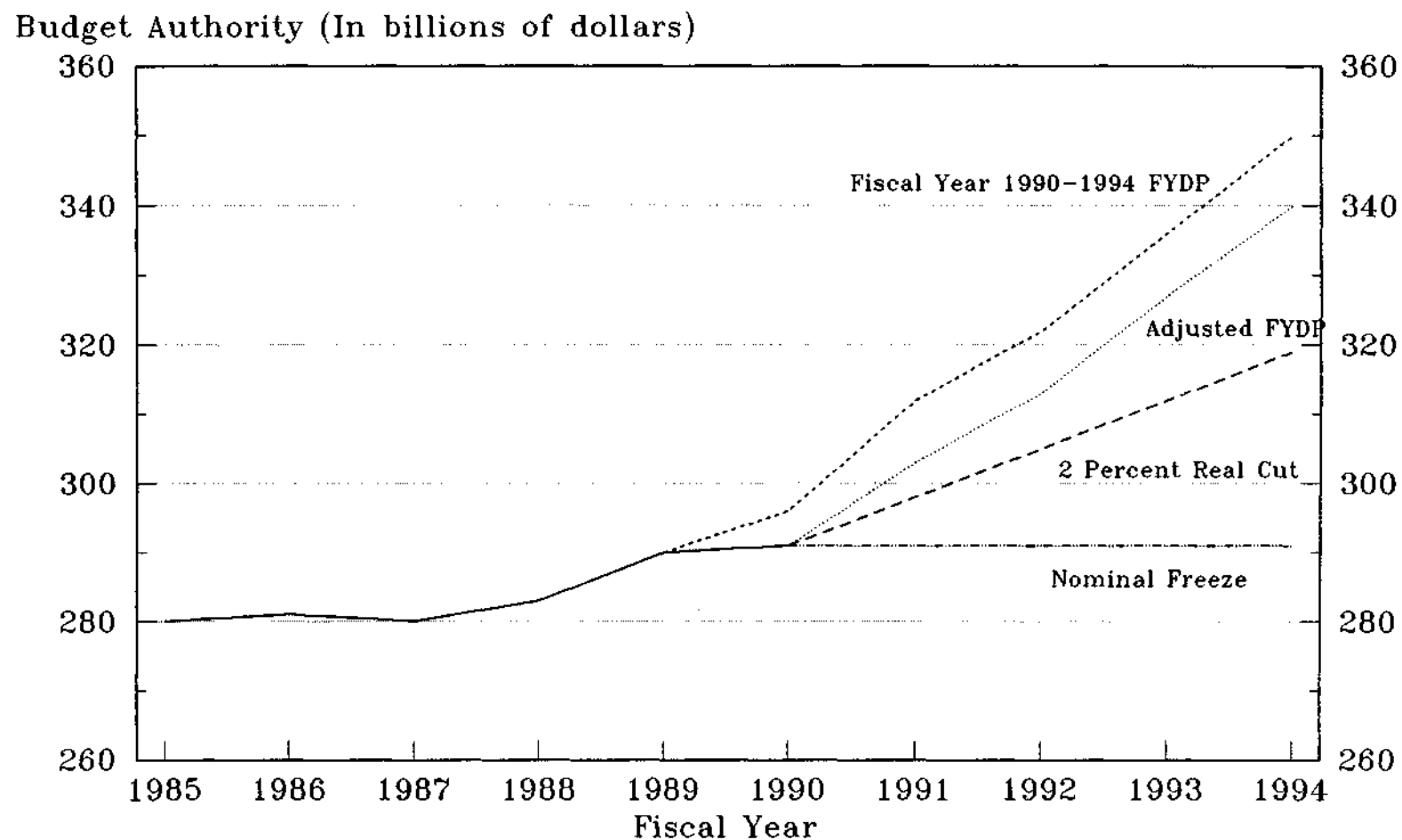
**TABLE 3. APRIL 1989 FIVE-YEAR DEFENSE PROGRAM AFTER ADJUSTMENT FOR CONGRESSIONAL ACTION (By fiscal year, in billions of dollars of budget authority)**

Appropriation	1990	1991	1992	1993	1994	Total
<b>Five-Year Defense Program</b>						
April 1989 (With original inflation assumptions)	295.6	311.0	322.0	335.9	349.8	1,614.3
Reduction by the Congress	4.2	8.2	8.8	9.2	9.6	39.9
Adjusted FYDP	291.4	302.8	313.2	326.7	340.3	1,574.4
<b>Adjusted FYDP by Appropriation</b>						
Military Personnel	78.5	80.6	82.9	85.2	87.5	414.8
Operation and Maintenance/ Revolving Funds	86.0	91.7	93.2	96.9	102.6	470.4
Procurement	82.6	85.3	90.1	97.6	100.5	456.1
Research and Development	36.8	36.7	37.2	37.3	39.1	187.2
Military Construction and Family Housing	8.5	9.6	10.7	10.7	11.4	50.9
Other	-1.0	-1.1	-0.9	-0.9	-1.0	-5.1

SOURCE: Congressional Budget Office.

NOTE: Details may not add to totals because of rounding.

FIGURE 1. ALTERNATIVE DEFENSE BUDGET PATHS



SOURCE: Congressional Budget Office, based on Dept. of Defense data

Note: FYDP = Five-Year Defense Program

creation of a new weapons program or changed policy on manpower in a way that added to future costs. To the extent the Congress took these types of actions, the percentage method could create a misleading impression about the effects of Congressional decisions on the out-years.

It does not appear, however, that in 1990 the Congress took a large number of the type of actions that would make this percentage approach misleading. Of 16 new starts requested by DoD, the Congress approved all but one of them, generally at the amount requested. (New starts are defined as procurement or research programs for which funding is first sought in 1990.)

Nor do Congressional changes to more mature production and research programs appear to have made the percentage approach misleading. Table 4 considers 11 large research and procurement programs. Since the Congress is often not explicit about its intentions for the out-years, the table usually lists one interpretation of Congressional intent that would lead to lower costs (for example, terminate the program or make reductions in its funding in all the out-years) and one that would result in higher costs (for example, proceed with the program at historic rates). For each program, the table shows estimates of revisions to the FYDP in the 1990-1994 period under both sets of assumptions and the average of the two estimates. Individual programs may vary widely in cost, depending on the decisions of future Congresses. But a lower-cost result for one system might well tend to offset a higher-cost decision for another. To illustrate this averaging effect, CBO chose the midpoints of the range of budgetary effects for each program.



TABLE 4. EFFECTS OF CONGRESSIONAL DECISIONS ABOUT SELECTED MAJOR WEAPONS SYSTEMS ON FIVE-YEAR DEFENSE PROGRAM COSTS (In billions of dollars of budget authority)

Weapon System	Lower-Cost Assumptions		Higher-Cost Assumptions		Midpoint of Cost Range
	Action	Impact on FYDP	Action	Impact on FYDP	
AH-64 Apache Helicopter	Cancel after 1990	0.0	Buy 66 per year	2.6	1.3
AMRAAM Missile	Keep at low rate of production	-2.0	Return to plan after one-year delay	-0.4	-1.2
Army Helicopter Improvement Program	Cancel after 1990	0.2	Buy 36 kits per year	1.6	0.9
B-2 Bomber	Defer one aircraft to beyond 1994	-0.6	Same as low-cost option	-0.6	-0.6
C-17 Aircraft	Slip program by one year	-2.7	Same as low-cost option	-2.7	-2.7
CH/MH-53 Helicopter	Buy 10 a year	-1.0	Buy at Administration's planned rates	-0.2	-0.6
F-14D Aircraft	Cancel new aircraft procurement after 1990; continue modifications	0.7	Buy new aircraft under January 1989 plan; continue modifications	2.1	1.4
Multiple Launch Rocket System	Buy 24,000 a year through 1994	0.2	Buy 48,000 a year through 1994	0.8	0.5
Strategic Defense Initiative	Reduce funds by 1990 percentage	-7.6	Return to Administration's plan	-1.0	-4.3
Trident II Missiles	Reduce rate after 1990	-1.0	Buy at Administration's planned rates	-0.3	-0.7
V-22 Aircraft	Cancel after 1990	0.3	Buy 12 a year, starting in 1992	7.3	3.8
TOTAL		-13.5		+9.2	-2.2

SOURCE: Congressional Budget Office.

NOTE: FYDP = Five-Year Defense Program.

The sum of the midpoints is -\$2.2 billion--a reduction of 2.1 percent to the FYDP's estimate of costs for these 11 programs through 1994. This 2.1 percent reduction is similar to the average reduction of 3.8 percent to procurement programs that the percentage method yields. This similarity suggests that, at least for these selected programs, applying the 1990 percentage to the out-years may not significantly distort estimates of the effects in the out-years.

Thus, the adjusted FYDP may be one reasonable illustration of the possible effects on the out-years of Congressional action in the 1990s. The projections in the adjusted FYDP can be used to help answer a variety of budgetary questions.

#### How Does the Adjusted FYDP Compare with Historical Patterns?

In recent years the Congress has reduced the defense budget in real terms. Therefore, it is relevant to ask whether the April 1989 FYDP, adjusted for Congressional action using the percentage method defined above, would fit within the fiscal limits implied by Congressional action in recent years?

The answer is no. In the last three years, defense budget authority has declined by roughly 2 percent a year in real terms. The Administration's DoD budget request for 1991 would continue this historic pattern of decline. But the adjusted FYDP grows at an average rate of 1 percent a year, after adjustment for inflation. Thus, funds in this adjusted FYDP exceed by a four-year total of \$51 billion the dollars that would be available if the Congress were to reduce defense budget authority by 2 percent a year in real terms as the Administration's DoD

budget projections now assume. The gap would be even greater--a total of about \$117 billion in the 1991-1994 period--if recent political changes prompt the Congress to impose a nominal freeze on defense spending for this period (see Figure 1).

#### Was Readiness Sacrificed for Procurement?

In recent years, analysts have expressed concern that the military was taking delivery of sophisticated weapons that would be expensive to operate. At the same time, they claimed that the Congress and the Administration were not providing adequate funds to operate the weapons for enough time to maintain high combat readiness. There is no widely accepted definition of readiness-related funding, but it is often assumed to consist of spending for military personnel and operation and maintenance.

At first glance, Table 1 suggests that the Congress cut funds related to readiness (particularly funds for operation and maintenance), while adding to funding for procurement. This apparent shift in policy, however, is completely an artifact of the accounting changes discussed above. Based on programmatic changes shown in Table 2, appropriations for operation and maintenance and military personnel were actually reduced by a smaller percentage in 1990 (1.6 percent) than the cut levied on procurement (3.8 percent). Even after additions were made for the accounting changes, percentage reductions in the out-years remain slightly larger for procurement than for operation and maintenance and personnel.

### How Did R&D Fare Compared with Procurement?

Some analysts have also expressed concern that DoD was spending large sums on the research and development of weapons even though it was unlikely to have enough procurement funds to buy them. How did Congressional action affect this concern?

There need not be a direct relationship between today's research funding and future costs of procurement. As Congressman Les Aspin, the Chairman of the House Armed Services Committee, recently suggested, the Congress could complete the development of a weapon but then not buy it if the need for the weapon had changed. However, to the extent a relationship between research funding and procurement does exist, Congressional action should have helped to limit pressure for future increases in procurement spending. Based on the programmatic changes, 1990 funding for research and development was reduced by 6.8 percent compared with the 3.8 percent cut levied on procurement. Using the percentage method, changes in the 1991-1994 period continued to be larger for research and development (7.6 percent) than for procurement (2.4 percent).

### Service Budget Trends

Trends in procurement funding for the various military services provide a rough measure of how Congressional actions affected funding for the allocation of weapons

among broad military missions--naval forces, ground forces, and so forth.<sup>1</sup> After adjusting for accounting changes, all three military departments experienced declines in procurement funding of about \$1 billion each compared with their fiscal year 1989 funding levels. In percentage terms, this decrease weighs most heavily on the Army, whose procurement budget is considerably smaller than those of the other two military departments.

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1. This measure is far less than perfect. For example, the budget of the Department of the Navy primarily includes funds for naval forces but also includes funds for the ground forces of the U.S. Marine Corps and for naval strategic nuclear forces. Thus, changes in the Navy's budget could affect several military missions in ways that are not separately identified in this paper.